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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,868	06/05/2000	Gordon Caruk	0100.0000430	7484

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EXAMINER

KING, JUSTIN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 10/23/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten signature

Office Action Summary

Application No.

09/586,868

Applicant(s)

CARUK ET AL.

Examiner

Justin I. King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the internal circuit" in claim 21's second line. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brickford et al. (U.S. Patent No. 6,141,021).

Referring to claim 1: Brickford discloses a method and an apparatus for eliminating contention on an accelerated graphics port (AGP). Brickford discloses a configurable interface circuit with a first internal circuit (figure 3, structure 118) operable to provide a first internal signal (the graphic signal) via a first internal signal path (the path connecting to the 110) and a selector (figure 3, structure 124) operable to select either the first internal signal (signals from structure 118) or the first external signal (signals from structure 122).

Although Brickford does not explicitly disclose an input buffer to receive the external signals via a first external signal path, an "Official Notice" is taken on the following: it is a common industrial practice in the computer art to equip an input buffer with the AGP.

Hence, it would have been obvious to one having ordinary skill in the computer art to modify Brickford with common industrial practice at the time applicant made the invention to enhance the graphical processing capability.

Referring to claim 2: Claim 2 is rejected over Brickford as stated above; furthermore, Brickford discloses an output buffer (figure 6, structure 170) to receive a second internal signal (the signal from the AGP controller and other devices). Although Brickford does not explicitly disclose a separate second internal signal path for conveying signals into the output buffer, neither Brickford explicitly discloses the output buffer uses the same first external signal path to transmit signals out, the court has held that duplication of the working parts of a device and forming in one piece an article which has formerly been formed in two pieces involve only routine skill in the art (St. Regis Paper Co. v. Bemis Co., 193 USPQ 8 and Howarde v. Detroit

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Stove Works, 150 U.S. 164). Such that it only takes routine skill in the computer art to add an additional internal signal path and to integrate the external output path and external input path into one external path.

Referring to claim 3: Claim 3 is rejected over Brickford as stated above; furthermore, the Brickford's system is inherently operable to propagate graphic signal with a common protocol.

Referring to claim 4: Claim 4 is rejected over Brickford as stated above; furthermore, Brickford discloses a PCI bus protocol.

Referring to claim 5: Claim 5 is rejected over Brickford as stated above; furthermore, Brickford discloses an AGP bus protocol.

Referring to claim 6: Claim 6 is rejected over Brickford as stated above; furthermore, an "Official Notice" is taken on following: the NGP is a well-known industrial practice at the time applicant made the invention.

Referring to claim 7: Claim 7 is rejected over Brickford as stated above; furthermore, an "Official Notice" is taken on the following: Although Brickford does not explicitly disclose a north bridge, it is a well-known industrial design to equip a north bridge and a south bridge to coordinate the signal conveyance on a motherboard. The commonly designed north bridge connects to CPU, AGP, and RAM; and the north bridge has the control over the AGP signals' transmission. Such that the north bridge is equivalent to the claimed second internal circuit, the internal signal designated to the AGP is equivalent to the claimed second internal signal. Since the north bridge has the control over the AGP signal's transmission, it has the ability to block the signals designated to AGP, and the selector will not be able to receive any signal.

Referring to claim 8: Claim 8 is rejected over Brickford as the arguments for claim 2 stated above.

Referring to claim 9: Claim 9 is rejected over Brickford as stated above; furthermore, it is the selector's intended purposes to select signals that is either the first internal signal or the first external signal and to transmit the signals to the designation via the north bridge if the north bridge is equipped. And the claimed second internal signal is the internal input signal for graphic display, therefore the signal is only transmitted from the north bridge to AGP; hence, it is said the north bridge is inoperable to receive the second internal signal from the selector.

Referring to claim 10: Claim 10 is rejected over Brickford as the argument for claim 2 stated above; furthermore, the first mode and the second mode represent the selection of the source for handling the graphic display.

Referring to claim 11: Claim 11 is rejected over Brickford as stated above; furthermore, the north bridge is intended to connect to buses, therefore, it is inherent for the north bridge to have a bus interface.

Referring to claim 12: Claim 12 is rejected over Brickford as the arguments for claim 7 stated above.

Referring to claim 13: Claim 13 is rejected over Brickford as stated above; furthermore, the circuit is inherent to have a bus interface since it has to connect to a bus for conveying graphic signals.

Referring to claim 14: Claim 14 is rejected over Brickford as the argument for claim 1 stated above.

Referring to claim 15: Claim 15 is rejected over Brickford as the argument for claim 2 stated above.

Referring to claim 16: Claim 16 is rejected over Brickford as the arguments for claims 2 and 7 stated above.

Referring to claim 17: Claim 17 is rejected over Brickford as the argument for claim 3 stated above.

Referring to claim 18: Claim 18 is rejected over Brickford as stated above; furthermore, it is the selector's intended purpose to select signals.

Referring to claim 19: Claim 19 is rejected over Brickford as stated above; furthermore, since the input buffer is meant to convey the signals to the AGP controller rather to the on-chip graphic circuit, it is said that since the input buffer is inoperable to provide the external signal from the external circuit to the first internal circuit.

Referring to claim 20: Claim 20 is rejected over Brickford as the argument for claim 19 stated above; furthermore, the output buffer is not designed for conveying the external signal to the internal graphic circuit, therefore, it is said that the output buffer is inoperable to provide the first external signal from the first external signal path to the first internal circuit.

Referring to claim 21: Claim 21 is rejected over Brickford as the argument for claim 7 stated above; furthermore, the internal circuit is equivalent to an on-chip graphic circuit, and the internal I/O circuit is equivalent to the input buffer, which assists the signal conveyance from an add-on AGP card. Since the input buffer is meant to convey the signals to the AGP controller from the add-on AGP card, it is said that since the input buffer directs signals to the controller, it prevents the signal from reaching the internal on-chip graphic circuit.

Referring to claim 22: Claim 22 is rejected over Brickford as the argument for claim 21 stated above.

Referring to claim 23: Claim 23 is rejected over Brickford as the arguments for claims 2 and 7 stated above.

Referring to claim 24: Claim 24 is rejected over Brickford as stated above; furthermore, an “Official Notice” is taken on the following: Although Brickford does not explicitly disclose multiplexing as the selecting mean, the multiplexing is a well-known selecting practice in the computer art.

Referring to claim 25: Claim 25 is rejected over Brickford as stated above; furthermore, Brickford does not disclose any input buffer for conveying internal signal to the AGP from the rest of the system.

Referring to claim 26: Claim 26 is rejected over Brickford as the argument for claim 4 stated above.

Referring to claim 27: Claim 27 is rejected over Brickford as the argument for claim 5 stated above.

Referring to claim 28: Claim 28 is rejected over Brickford as the argument for claim 6 stated above.

Referring to claim 29: Claim 29 is rejected over Brickford as the arguments for claims 2 and 7 stated above; furthermore, Brickford discloses a process unit coupled to a processor bus and a memory unit coupled to a memory bus (figure 2, structures 14 and 18).

Referring to claim 30: Claim 30 is rejected over Brickford as the argument for claim 21 stated above.

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Referring to claim 31: Claim 31 is rejected over Brickford as the argument for claims 1, 2, and 21 stated above.

Referring to claim 32: Claim 32 is rejected over Brickford as the argument for claims 1 and 2 stated above.

Referring to claim 33: Claim 33 is rejected over Brickford as the argument for claim 21 stated above.

Referring to claim 34: Claim 34 is rejected over Brickford as the argument for claim 21 stated above.

Referring to claim 35: Claim 35 is rejected over Brickford as the argument for claim 25 stated above.

Referring to claim 36: Claim 36 is rejected over Brickford as the argument for claims 2 and 18 stated above.

Referring to claim 37: Claim 37 is rejected over Brickford as the argument for claim 4 stated above.

Referring to claim 38: Claim 38 is rejected over Brickford as the argument for claim 5 stated above.

Referring to claim 39: Claim 39 is rejected over Brickford as the argument for claim 6 stated above.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,133,772 to Drapkin et al.: Drapkin discloses that it is known to one in the computer to equip an input buffer with the AGP.

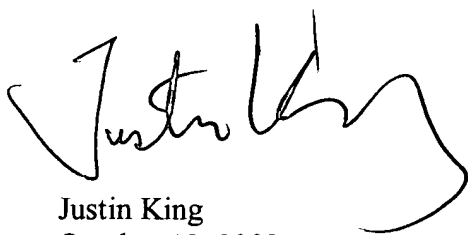
U.S. Patent No. 4,529,840 to Colton et al.: Colton discloses the NGP practice.

U.S. Patent No. 6,286,083 to Chin et al.: Chin discloses a system equipping the AGP with the north bridge and the multiplexing for selecting means.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin King whose telephone number is (703) 305-4571. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Wong can be reached at (703) 305-3477.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703)-306-5631.



Justin King
October 18, 2002



PETER WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100